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**527 CMR: BOARD OF FIRE PREVENTION REGULATIONS**

**527 CMR 15.00: KEEPING, HANDLING AND TRANSPORTATION OF FLAMMABLE AND COMBUSTIBLE LIQUIDS, AND THE DISPOSITION OF CRUDE PETROLEUM OR ANY OF ITS PRODUCTS IN HARBORS OR OTHER WATERS OF THE COMMONWEALTH**

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**15.01: Application**

(1) 527 CMR 15.00 applies to any flammable or combustible liquid pumping equipment, hoses, nozzles and appurtenances and any area within 25' of any pumping equipment, hoses, nozzles and other appurtenances used for delivering flammable or combustible liquids to or receiving flammable or combustible liquids from a fueling facility, mobile fueling facility (tank vehicle), fuel barge, fuel vessel, portable fuel tank and safety cans, including all facilities used in connection therewith.

(2) 527 CMR 15.00 shall not apply to:

- (a) Liquefied Petroleum Gas Containers and Systems regulated by 527 CMR 6.00;
- (b) Receiving, storing or distribution of flammable or combustible liquids by fuel barges or fuel vessels in Bulk Plant Loading and Unloading Facilities regulated by 527 CMR 18.00;
- (c) Fuel barges and fuel vessels transferring flammable or combustible liquid cargoes utilizing a flange-to-flange closed transfer piping system as approved by Title 33 Code of Federal Regulations (CFR) 154;
- (d) Vessels certified under Title 46, Code of Federal Regulations (CFR) and vessels or facilities certificated or regulated under Title 33 CFR 154, unless the certificated or regulated vessel or facility transfers or receives flammable or combustible liquid from a vessel or facility rated at less than 10,500 gallon capacity, or the vessel or facility acts as a marina or fueling facility that services pleasure vessels, fishing vessels, or tug boats;
- (e) Foreign vessels regulated under Title 33 CFR 155 and U.S. and foreign public vessels, i.e. warships, naval auxiliaries or other ships owned and operated by a country when engaged in non-commercial service.

**15.02: Definitions**

For the purpose of 527 CMR 15.00, the following words shall have the meanings respectively assigned to them:

Approved, The approval of any equipment or materials based on compliance with accepted principles or recognized engineering practice, by a third party, nationally recognized testing laboratory, using standard test procedures or another recognized protocol, who shall publish a list or affix a label, certifying the suitability of the product to its intended use. Nationally recognized testing laboratories shall be approved by the Marshal, as laboratories suitable for evaluating equipment or materials of this type.

Approved Auxiliary Tanks, any listed or labeled auxiliary tank whose construction and components are compatible with its intended use and approved by the Marshal.

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Approved Fuel Hose, any listed or labeled fuel hose approved by the Marshal. Said hose shall be a rubber like material resistant to petroleum products and petroleum product additives, containing a continuous static ground, not exceeding 30' in length without the written approval of the head of the Fire Department and the Marshal. Where hose length at a marine fueling facility exceeds 30' the hose shall be secured by a hose retrieving mechanism so as to protect it from damage.

Approved Shut Off Control Valve, any listed or labeled valve whose construction and components are compatible with its intended use and approved by the Marshal.

Approved Portable Fire Extinguisher, any extinguisher with a 2A, 20-BC rating. The rating shall be in accordance with National Fire Protection Association (NFPA) 10, the Standard for Portable Fire Extinguishers.

Cargo Tank, any container having a liquid capacity of 119 gallons or more intended primarily for the carriage of flammable or combustible liquids, including appurtenances, reinforcements, fittings, and closures and which:

- (a) is permanently attached to or forms a part of a motor vehicle, or is not permanently attached to a motor vehicle but which by reason of its size, construction or attachment to a motor vehicle is loaded or unloaded without being removed from the motor vehicle; and
- (b) is not fabricated under a DOT specification for portable tanks; and
- (c) does not solely supply fuel for the propulsion of the transport vehicle upon which it is mounted.

Combustible Liquid, Any liquid having a flash point at or above 100°F shall be known as a Class II or Class III Liquid. Combustible liquids shall be divided into the following classifications:

Class II: Liquids having flash points at or above 100°F and below 140°F.

Class IIIA: Liquids having a flash point at or above 140°F and below 200°F.

Class IIIB: Liquids having a flash point at or above 200°F.

Flammable Gas, Either a mixture of 13% or less (by volume) with air forms a flammable mixture or the flammable range with air is wider than 12% regardless of the lower limitation. These limitations shall be determined at atmospheric temperature and pressure.

Flammable Liquid, Any liquid having a flash point below 100°F and having a vapor pressure not exceeding 40 psia at 100°F Flammable liquids shall be known as Class I liquids and shall be divided into the following classifications:

Class IA: Liquids having flash points below 73°F and having a boiling point below 100°F.

Class IB: Liquids having flash points below 73°F and having a boiling point at or above 100°F.

Class IC: Liquids having flash points at or above 73°F and below 100°F.

Flammable Solid, A solid substance, other than one classified as an explosive, which is liable to cause fires through friction, through absorption of moisture, through spontaneous chemical changes, or as a result of retained heat from manufacturing or processing.

Flash Point, The minimum temperature in degrees Fahrenheit at which a flammable or combustible liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion. The flash point of a liquid shall be determined by appropriate test procedure and apparatus as specified in ASTM D56 and ASTM D93.

Fuel Barge, any fuel vessel not equipped with means of self propulsion.

Fueling Facility, any pumping equipment, hoses, nozzles, and appurtenances and any area within 25' of any pumping equipment, hoses, nozzles and other appurtenances used for delivering flammable or combustible liquids to or receiving flammable or combustible liquids from a boat, vessel or barge, and shall include all facilities used in connection therewith.

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Fueling Facility Operations Supervisor, any responsible employee 18 years of age or older, that the fueling facility permit holder attests to be competent in the handling of flammable or combustible liquids and to be familiar with and to understand the contents of 527 CMR 15.00, and who is fully aware of the operation, mechanics and hazards inherent to the handling of flammable or combustible liquids and the fueling of vessels.

Fuel Vessel, any regulated boat or vessel especially constructed or converted to be used for the keeping, handling and transportation of flammable or combustible liquids and the disposition of crude petroleum or any of its products.

Harbor Master, any individual including assistant harbor masters appointed in accordance with the provisions of M.G.L. c. 102.

Inspector, any inspector or police officer of the Department of Public Safety or any person to whom the Marshal or the head of the Fire Department may delegate authority under M.G.L. c. 148.

Labeled, equipment or materials to which has been attached a label, symbol or other identifying mark of an organization acceptable to the Marshal, and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

Listed, equipment or materials included in a list published by an organization acceptable to the Marshal, and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials and whose listing states either that equipment or materials meet appropriate standards or have been tested and found suitable for use in a specific manner.

Marine Wharf, any bulkhead, pier, wharf, dock or other structure and their appurtenances built along, abutting, over or contiguous to navigable waters or other water and used for the transfer of flammable or combustible liquids.

Marina or Pleasure Boat Berthing Area, any sheltered water area in a harbor provided with moorings, floats, and buoys for boats yachts and power marine craft including those places assigned to a vessel in port when anchored or laying alongside a pier or wharf.

Marshal, the State Fire Marshal.

Mobile Fuel Facility, Any tank truck or tractor and tank semi-trailer combination equipped with a cargo tank mounted thereon or built as an integral part thereof, used for the transportation of flammable or combustible liquids upon the highways, and functioning as a fueling facility.

Safety Can, a container of five gallons capacity or less having a spring-closing lid and spout cover and so designed that it will safely relieve internal pressure when subjected to fire exposure, and constructed and tested in accordance with either Underwriters Laboratories (UL) Standard 30 or Factory Mutual (FM) Standard 6051/6052, for the storage and handling of small quantities of flammable or combustible liquids. Safety cans must comply with 527 CMR 10.05.

Vessel, every description of watercraft used or capable of being used as a means of transportation.

**15.03: Storage**

(1) The provisions of 527 CMR 9.00, shall be complied with in so much as said provision do not conflict with the provisions of 527 CMR 15.00.

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(2) Every new or replacement tank and its piping system shall be upgraded, maintained and tested in accordance with the applicable provisions of 527 CMR 9.00: *Tanks and Containers*.

**15.04: Handling, Transporting or Disposing**

(1) No person shall keep, handle, store, or transport flammable or combustible liquids, or dispose of crude petroleum or any of its products on the waters of the Commonwealth except in accordance with 527 CMR 15.00.

(2) Flammable or combustible liquids shall not be kept, handled, stored or transported in any harbor or on other waters of the Commonwealth unless a permit has first been secured therefor from the Marshal.

(a) Application for the permit is to be made on Fire Prevention (FP) form 293, as revised.

(b) The permit shall be issued on Fire Prevention (FP) form 294, as revised.

(3) The permit provided for in the preceding section shall remain in force for a term to be determined by the Marshal unless suspended or revoked for cause by the Marshal, and shall be subject to examination at all times by any inspector, police officer, or harbor master within his jurisdiction.

(4) Flammable and combustible liquids and crude petroleum or any of its products kept on harbors or other waters of the Commonwealth shall be kept, transported, stored and/or delivered in fuel barges, fuel vessels, tank vehicles, tanks and containers specially designed, constructed or adapted for such purposes and approved by the Marshal.

(5) Any flammable or combustible liquid being transported on the waters of the Commonwealth other than by permanent supply tank shall be transported in approved auxiliary tanks or other approved safety cans. Such approved auxiliary tanks or safety cans shall have a combined capacity not to exceed 28 gallons. Any auxiliary tank or safety can larger than seven gallons must be blocked or secured in place to prevent any possibility of shift in position of more than two inches in any direction due to the motion of the vessel.

(6) No Class I flammable liquids shall be delivered to any vessel having its tanks located below deck unless each tank is equipped with a separate fill pipe, the receiving end of which shall be securely connected to a deck plate and fitted with a screw cap. Such pipe shall extend to and into the tank. Vessels receiving Class II or Class IIIA combustible liquids shall have the receiving end of the fill pipe securely connected to a deck plate and fitted with a screw cap. Such pipe may connect to a manifold fuel fill system which shall extend to and into each separate tank. Each flammable or combustible liquid tank shall be provided with a suitable vent pipe which shall extend from the tank to the outside of the coaming or enclosed rails so that the vapors will dissipate outboard.

(7) Vessel owners or operators shall not offer their craft for fueling unless;

(a) The tanks being filled are properly vented to dissipate fumes to the outside atmosphere and the fuel systems are liquid and vapor tight with respect to hull interiors.

(b) All fuel systems are designed, installed and maintained in compliance with the specifications of the manufacturer of the vessel.

(c) Communication has been established between the fueling facility operations supervisor and the person in control of the vessel receiving the flammable or combustible liquid so as to determine the vessel fuel capacity, the amount of flammable liquid on board, and the amount of flammable or combustible liquid to be taken on board.

(d) The electrical bonding and grounding systems of the vessel have been maintained in accordance with the specifications of its manufacturer.

(8) No flammable or combustible liquids shall be delivered to any storage tank by means of a pump or under pressure unless such storage tank is designed to withstand the additional stress to which it may be subjected during filling and the vent pipe for such tank is of sufficient size to safely relieve the tank of undue pressure.

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(9) No flammable or combustible liquids shall be delivered to the tank of any vessel from a storage tank, fuel vessel, fuel facility, mobile fueling facility, or marine wharf unless a competent person designated by the permit holder and trained by the employer as a fueling facility operations supervisor is present to supervise the operation during the entire period. Said designated and trained employee shall be familiar with the dispensing mechanism and emergency shut off controls and shall be within 15' of such dispensing controls during the fueling operation and shall remain within a direct clear unobstructed view of both the vessel fuel filler neck and the fueling facility emergency fuel shut off mechanism. Prior to the delivery of any flammable or combustible liquid the fueling facility operations supervisor shall insure that the vessel is properly moored and that all connections are made.

(10) No Class I flammable liquid shall be delivered to the tank of a vessel from a fueling facility except by means of an approved fuel hose equipped with an approved automatic shut off nozzle with the latch-open device defeated which shall be held open manually during delivery.

(11) Class II or Class IIIA combustible liquids shall be delivered to the tank of a vessel from a fueling facility either by 527 CMR 15.04(10) or by means of a flange-to-flange closed transfer piping system utilizing approved hose and full threaded connections or flanges that meet Standard B16.5, Steel Pipe Flanges and Flange Fittings or Standard B16.24, Brass or Bronze Pipe Flanges of the American National Standards Institute (ANSI) or quick connect couplings that are approved by the Marshal.

(12) A portable or fixed fill vent and signal device shall be securely affixed to the fuel filler pipe of the tanks receiving Class II or III flammable or combustible liquid to insure that the product is not overflowed.

(13) No flammable or combustible liquid shall be sold or delivered to the tank of any vessel or to any person by any form of unattended self-serve facility.

(14) No flammable or combustible liquids shall be delivered from a portable fuel container to the tank of any vessel with a fuel tank capacity greater than 28 gallons without the prior written approval of the head of the Fire Department. A single delivery of not more than seven gallons in the event of an emergency is excepted. All provisions of both 527 CMR 15.04(6) and (7) shall be complied with at the time of such delivery.

(15) Fueling shall never be undertaken at night except under well-lighted conditions.

(16) During fueling operations smoking shall be forbidden on board the boat or vessel and on the fueling facility.

(17) Before opening the tanks of the vessel to be fueled, the following precautions shall be observed;

- (a) All engines, motors, fans and bilge blowers which are not explosion-proof shall be shut down.
- (b) All open flames and smoking material shall be extinguished and all exposed heating elements shall be turned off.
- (c) Galley stoves shall be extinguished.
- (d) All ports, windows, doors and hatches shall be closed.
- (e) The quantity of fuel to be taken aboard shall be determined in advance of fueling operations by the fueling facility operations supervisor in accordance with 527 CMR 15.04(7)(c).
- (f) A sufficient number of fire extinguishers of a type approved by the Marshal shall be readily accessible.
- (g) The fuel delivery nozzle shall be put into contact with the vessel fill pipe before the flow of fuel shall commence and this bonding contact shall be continuously maintained until fuel flow has stopped. There is a serious hazard from static discharge unless this rule is observed.

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(18) Tanks shall not be completely filled. Allow a minimum of 2% of tank space for expansion. This space allowance should be 6% if the fuel taken aboard is at a temperature of 32°F or below. After the fuel flow has stopped;

- (a) The fill cap shall be tightly secured.
- (b) Any spillage whatsoever shall be wiped up immediately.
- (c) If Class I flammable liquid has been delivered, the entire vessel shall remain opened and bilge blowers turned on and allowed to run for at least five minutes before starting any engines or lighting galley fires. If bilge blowers are not available, an additional five minutes of venting shall be required.

(19) In the event of a leak, rupture, spill, overflow or other incident involving the handling of flammable or combustible liquids within 500 yards of the fuel facility both the Fire Department and the Marshal shall be notified immediately by the fueling operations supervisor or the permit holder.

(20) All vessel fueling operations shall be carefully accomplished in accordance with the 527 CMR 15.00 and utmost care shall be exercised during these operations.

(21) Conformance with the requirements of 527 CMR 15.04(1) through (20) shall be the responsibility of the vessel owner/operator, the permit holder and the on-site fueling facility operations supervisor who shall immediately terminate fueling operations if the provisions of 527 CMR 15.00 are not complied with.

**15.05: Piping, Valves and Fittings for Marine Wharfs**

(1) All piping systems shall be substantially supported and protected against physical damage and excessive stresses arising from impact, settlement, vibration, expansion, contraction, or tidal action.

(2) A readily accessible valve to shut off the flammable or combustible liquid supply from shore shall be provided in each fuel pipeline at or near the approach to the marine wharf and at the shore end of each fuel pipeline adjacent to the point where a flexible hose is attached. Each valve shall be marked "EMERGENCY FUEL SHUT OFF" in two inch red block capital letters.

(3) Pipe, valves, faucets, fittings and other pressure-containing parts of piping systems shall meet the material specifications, pressure and temperature limitations of ANSI B31.3-1980, Petroleum Refinery Piping. Nodular iron shall conform with American Society for Testing Materials (ASTM) A395-80, Ferric Ductile Iron Pressure Retaining Castings for Use at Elevated Temperatures. Flexible piping which is approved, certified as suitable for its intended use by the manufacturer, and provides product secondary containment shall meet the requirements of 527 CMR 15.05. Valves at storage tanks, as required by NFPA 30, (1993), Chapter 3, Piping Systems, shall be complied with in so much as said provisions do not conflict with the provisions of 527 CMR 15.00.

(4) A means shall be provided to assure flexibility of piping in event of excessive motion of wharfs. Flexible piping and swing joints shall be of an approved type designed to withstand the forces and pressures exerted upon piping.

(5) Pipelines on wharfs shall be adequately bonded and grounded according to the provisions of the Massachusetts Electrical Code if Class I liquids are handled. If excessive stray currents are encountered, insulating joints shall be installed. Bonding and grounding connections on all pipelines shall be located on the wharf side of hose riser insulating flanges, if used, and shall be accessible for inspection.

(6) Hose used in connection with filling tanks or the discharge of flammable or combustible liquids shall be approved fuel hose and shall be of sufficient length and properly supported to prevent undue strain thereto. In the filling of a fuel tank with flammable or combustible liquids a tight connection shall be made between the filling hose nozzle or discharge pipe and the filler pipe of the tank to be filled.

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(7) Marine wharves greater than 200 feet in length having a fueling facility shall be equipped with a minimum of four approved shut-off controls. One shut-off control shall be a pump switch which will be the control used by the operator to dispense the fuel under normal conditions (approved fuel delivery nozzle). The second shut-off control valve shall be located four feet from the base of the metering unit. The third shut-off control valve shall be located 15 feet from the metering unit. The fourth shut-off control valve shall be located on the shore side of the metering unit at a point where the piping system starts to extend over the water. The location of such approved shut-off control devices shall be familiar to the fueling facility operations supervisor. Said shut-off controls are to be marked "EMERGENCY FUEL SHUT OFF" in two inch red block capital letters and shall be accessible at all times.

(a) Marine piping systems shall contain a sufficient number of approved valves to control the flow of flammable or combustible liquid during normal operations and to provide adequate shut off protection in the event of fire or physical damage.

(b) Cast iron valves or fittings shall not be used in any pipe connection between the tank and dispensing nozzle.

(c) If a remote pumping system is used, a labeled or listed rigidly anchored emergency shut off valve incorporating a fusible link or other thermally actuated device, designed to close automatically in event of fire exposure or severe impact, shall be installed in accordance with the manufacturer's instructions in the flammable or combustible liquid supply line at the base of each individual dispenser or at the inlet of each overhead dispenser. The automatic closing feature of this valve shall be checked at least once a month by manually tripping the hold-open linkage. An emergency shut off valve incorporating a slip-joint feature shall not be used.

(8) At marine fueling facilities where tanks are at an elevation which produces a gravity head on the dispensing unit, the tank outlet shall be equipped with a device, such as a solenoid valve, positioned adjacent to, and downstream, so installed and adjusted that liquid cannot flow by gravity from the tank in case of piping or hose failure when the dispenser is not in use.

(9) Shutoff and check valves shall be equipped with a pressure-relieving device that will relieve any pressure generated by thermal expansion of the contained liquid back to the storage tank.

**15.06: Mobile Fuel Facility**

(1) All mobile fuel facilities shall comply with the provisions of 527 CMR 8.00, Transportation of Flammable and Combustible Liquids, in so much as said provisions do not conflict with the provisions of 527 CMR 15.00.

(2) No mobile fuel facility loaded with flammable or combustible liquids as defined in 527 CMR 15.00 shall be left unattended for more than one hour unless the driver notifies the head of the Fire Department in the city or town where the vehicle is parked. The head of the Fire Department may assume control of the vehicle and its contents if the driver or owner is unable or unwilling to remove the vehicle or its flammable or combustible contents within a reasonable time.

**15.07: Fuel Vessels and Barges**

(1) No fuel barge or fuel vessel shall be permitted to anchor or moor for fueling purposes within a marina or pleasure boat berthing area. A 200 foot radius marine fueling safety zone shall be maintained between the fuel barge or fuel vessel acting as a fueling facility and any marina or pleasure boat berthing area. This 200 foot radius marine fueling safety zone may be subject to written review by the head of the Fire Department in specific instances. The Marshal shall approve the marine fueling safety zone written review.

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(2) Fuel barges and fuel vessels shall be subject to assignment as to location by the harbor master in accordance with the authority vested in him by M.G.L. c. 102. When located on waters where no harbor master is provided, such assignment shall be made by the Marshal. The Marshal shall approve the permanent assignment of fuel barges and fuel vessels.

(3) Fuel barges, fuel vessels, and fueling facilities shall be open to inspection by the Marshal, an inspector, the head of the Fire Department, a harbor master having jurisdiction, or any person to whom the Marshal or head of the Fire Department may delegate authority.

(4) Flammable and combustible liquids kept for resale on fuel barges or fuel vessels shall be stored in metal tanks. Such tanks shall be constructed, braced and secured so as to prevent injury, rupture or displacement and to withstand the normal stresses to which they may be subjected. Tanks constructed in accordance with Code of Federal Regulations Title 46 CFR Part 30-40, subchapter D-Tank Vessels, will be considered as complying with the requirements of 527 CMR 15.07(4).

(5) Every fuel barge or fuel vessel used for the keeping of flammable or combustible liquids for resale and every fuel barge or fuel vessel used for the transportation of flammable or combustible liquids shall be identified by a name marked in clearly legible letters not less than four inches in height on some clearly visible exterior part of the port and starboard bow and the stern of that fuel barge or fuel vessel. The hailing port of such fuel barges and fuel vessels shall be marked in clearly legible letters not less than four inches in height on some clearly visible exterior part of the stern of the fuel barge or fuel vessel.

(6) Fuel barges and fuel vessels which in the opinion of the head of the Fire Department or the Marshal pose a substantial fire hazard due to the cargo they are carrying or the location they are moored shall rig fire warps. Fire warps shall consist of hawsers of sufficient size to take the barge or vessel under tow in the event of an emergency. Fire warps shall be secured to the deck of the barge or vessel and shall hang over the outboard side to within six feet of the surface of the water. An eye shall be spliced into the outboard end of the warp of sufficient size to permit the rapid attachment of a towing shackle.

(7) When receiving, discharging or storing flammable or combustible liquids, flammable solids or flammable gases, every fuel barge or fuel vessel shall display on a suitable staff an International Code Flag B which shall be readily discernible from a distance of not less than 1000' by day and shall be properly illuminated at night.

(8) Every fuel barge, fuel vessel or fueling facility used for the keeping of flammable or combustible liquids for resale shall be provided with such additional fire extinguishing appliances as may be prescribed by the Marshal.

(9) Smoking is prohibited on any fuel barge or fuel vessel used for the keeping of flammable or combustible liquids for resale and on any fuel barge or fuel vessel used for the transportation, storage or delivery of flammable or combustible liquids.

(10) All additional provisions of 527 CMR 15.00, must be complied with where applicable.

**15.08: Vapor Recovery Systems**

527 CMR 15.08 is left blank pending the development of Federal Regulation.

**15.09: General Provisions**

(1) All electrical components for dispensing flammable and combustible liquids shall be installed in accordance with Article 555, Marinas and Boat Yards of 527 CMR 12.00: *the Massachusetts Electrical Code*.



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- (a) All electrical equipment installed and used must be in accordance with the Massachusetts Electrical Code as it applies to Wet, Damp, and Hazardous Locations.
- (b) Clearly identified emergency switches readily accessible in case of fire or physical damage at any dispensing unit shall be provided on each marine wharf so interlocked as to shut off power to all pump motors from any individual location and to reset only from the master switch at the main electrical disconnect panel. Each such switch is to be identified by an approved sign stating "EMERGENCY PUMP SHUTOFF" in two inch red block capital letters.
- (c) All electrical wiring for power and lighting shall be installed on the side of the marine wharf opposite from the flammable or combustible liquid piping system.

(2) The fueling facility shall be located so as to minimize exposure to all other operational marina or pleasure boat berthing area facilities. Where tide and weather conditions permit, all flammable and combustible liquid fuel handling shall be outside the main berthing area. Inside marina or pleasure boat berthing area, fueling facilities shall be so located that in case of fire aboard a boat alongside, the danger to other boats near the facility will be minimal. No vessel or craft shall be made fast to or berthed at any marine wharf, except during fueling operations, and no vessel or craft shall be made fast to any other vessel or craft occupying a berth at a marine wharf, or other fueling facility.

(3) Fueling of floating marine craft at other than a fueling facility is prohibited except by prior written authorization by the head of the Fire Department.

(4) Materials shall not be placed on marine wharfs in such a manner as to obstruct access to fire fighting equipment or important piping system control valves. Where the marine wharf is accessible to vehicular traffic an unobstructed roadway to the shore end of the wharf shall be maintained for access by fire fighting apparatus.

(5) Water standpipe systems with approved 1½ inch hose connections shall be provided at marine wharfs for emergency fire protection. A Class III standpipe system shall be installed on all marine wharfs which extend more than 500' from the shore line. The standpipe system and related fire department connections shall be installed and tested in accordance with NFPA 14, the Standard for the Installation of Standpipe and Hose Systems. In addition, approved portable fire extinguishers shall be provided within 75' of areas requiring fire protection.

(6) A copy of the provisions contained in 527 CMR 15.04(6) through 15.04(21) inclusive and the following excerpt from M.G.L. c. 148 shall be conspicuously posted under glass on fuel barges and fuel vessels and at all fueling facilities:

M.G.L. c. 148, § 10B, as amended. "Any person who knowingly violates any rule or regulation made by the Board of Fire Prevention Regulations shall, except as otherwise provided, be punished by a fine of not less than one hundred dollars nor more than one thousand dollars."

(7) A suitable sign with the following legends printed in two inch red block capital letters on a white background shall be conspicuously posted at the dispensing area of all fueling facilities;

**BEFORE FUELING:**

- (a) Stop all engines and auxiliaries.
- (b) Shut off all electricity, open flames, and heat sources.
- (c) Check all bilges for fuel vapors.
- (d) Extinguish all smoking materials.
- (e) Close access fittings and openings that could allow fuel vapors to enter enclosed spaces of the vessel.

**DURING FUELING:**

- (a) Maintain nozzle contact with fill pipe.
- (b) Wipe up spills immediately.
- (c) Avoid overflowing.
- (d) Fuel filling nozzle must be attended at all times.

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**AFTER FUELING:**

- (a) Inspect bilges for leakage and fuel odors.
- (b) Ventilate until odors are removed.

(8) A registered professional engineer shall submit complete scaled plans and specifications of each proposed new fueling facility installation to the head of the Fire Department. All blueprints, plans and specifications shall be approved by the head of the Fire Department as to compliance with the provisions of 527 CMR 15.00, before any new installation is commenced. The plans and specifications shall provide the following information;

- (a) The exact name of the fueling facility and the address where it will operate.
- (b) Whether the construction is new or a conversion of an existing facility.
- (c) The layout of the following; the pier; the storage tanks; the piping system transporting flammable and combustible liquids from the storage tanks to the dispensing site; the location and path of the electrical static grounding system; the location and type of water standpipe system; the location of the nearest hydrant; the trade name, type and location of the piping system, flexible hose, couplings, control valves, and swing and swivel joints. A notation on the plan legend shall indicate the location and type of fire extinguishing systems, fuel dispensing nozzles, and the maximum number of dispensing nozzles which can be operated simultaneously.
- (d) A statement that the blueprints, plans and specifications of the installation comply with the requirements of the provisions of 527 CMR 15.00.
- (e) The date the original license (M.G.L. c. 148, § 13) was issued with restrictions, if any, and the name of the current license holder. A photostatic copy of the license and registration issued under M.G.L. c. 148, § 13, shall be attached. If a copy of the license is not available, a notarized letter from the city or town licensing authority shall be furnished. The notarized letter shall list all the information provided on the original license including type, amount and method approved for storage of flammable and combustible liquid(s), and any restrictions attached to the license.

(9) Fueling facility installations shall comply with the minimum material and installation standards set forth in NFPA 30, Flammable and Combustible Liquids Code and NFPA 30A, Automotive and Marine Service Station Code.

(10) Liquefied Petroleum Gas (LPG) cylinders shall not be filled, discharged or stored within 200' of a flammable or combustible liquid fueling facility.

(11) No construction, maintenance, repair or reconditioning work involving the use of open flames or arcs or spark-producing devices shall be performed at any fueling facility.

(12) No person shall pump, discharge, deposit, throw or spill, or cause to be pumped, discharged, deposited, thrown or spilled into or on the waters of any lake, pond, river, creek or brook, or into any public sewer or drainage system within the jurisdiction of this Commonwealth, or into or on the waters within three miles of the shore of this Commonwealth, any crude petroleum or its products or any other flammable or combustible liquid, or any bilge water, or any water or any sewage containing any of the said substances.

(13) All fueling facilities shall be maintained in a neat and orderly manner and no accumulations of excess amounts of rubbish or waste oils shall be permitted.

**15.10: Referenced Publication**

Documents or portions thereof that are referenced within 527 CMR 15.00 shall be considered a part of the requirements of 527 CMR 15.00. Refer to 527 CMR 49.00 for a complete listing of all documents referenced in 527 CMR.

**REGULATORY AUTHORITY**

527 CMR 15.00: M.G.L. c. 148, §§ 9, 10, 38E and 38H.